Attachment 'A'

39. A semiconductor processing method of depositing SiO_2 on a substrate within a chemical vapor deposition reactor comprising feeding at least one of H_2O and H_2O_2 into the reactor while feeding an organic silicon precursor, wherein the at least one of H_2O and H_2O_2 is fed into the reactor separately from the organic silicon precursor, and under conditions which are effective to reduce formation of undesired reaction intermediates of the organic silicon precursor which form at higher topographical elevations on the substrate than would otherwise occur without the feeding of the at least one of H_2O and H_2O_2 into the reactor under otherwise identical depositing conditions.

44. The semiconductor processing method of Claim 39, wherein the organic silicon precursor is selected from the group consisting of: tetraethoxysilane (TEOS), diethylsilane (DES), tetramethylcyclo-tetrasiloxane (TMCTS), fluorotriethoxysilane (FTES), and fluorotrialkoxysilane (FTAS).

45. The semiconductor processing method of Claim 39, wherein the chemical vapor deposition reactor is a hot wall reactor.

46. The semiconductor processing method of Claim 39, wherein the chemical vapor deposition reactor is a cold wall reactor.

47. A semiconductor processing method of chemical vapor depositing SiO_2 on a substrate comprising:

placing a substrate within a chemical vapor deposition reactor;

feeding an organic silicon precursor into the chemical vapor deposition reactor having the substrate positioned therein under conditions effective to decompose the precursor into SiO_2 which deposits on the substrate and into a gaseous oxide of hydrogen; and

feeding an additional quantity of the gaseous oxide of hydrogen into the reactor while feeding the organic silicon precursor into the reactor, wherein the organic silicon precursor and the additional quantity of the gaseous oxide of hydrogen are fed into the reactor from separate feed streams and under conditions which are effective to reduce formation of undesired reaction intermediates of the organic silicon precursor which form at higher topographical elevations on the substrate than would otherwise occur without the feeding of the at least one of H_2O and H_2O_2 into the reactor under otherwise identical depositing conditions.

48. A semiconductor processing method of chemical vapor depositing SiO_2 on a substrate comprising:

placing a substrate within a hot-wall, low-pressure chemical vapor deposition reactor;

feeding an organic silicon precursor into the hot wall chemical vapor deposition reactor having the substrate positioned therein;

feeding an additional quantity of the gaseous oxide of hydrogen into the hot wall low pressure chemical vapor deposition reactor while feeding the organic silicon precursor into the reactor, wherein the organic silicon precursor and the additional quantity of the gaseous oxide of hydrogen are fed into the reactor from separate feed streams; and

providing conditions effective to decompose the precursor into SiO_2 at a theoretical decomposition rate and effective to cause the additional quantity of gaseous oxide of hydrogen to reduce the theoretical decomposition rate to a lower actual decomposition rate, the reducing a function of at least some of the additional quantity of gaseous oxide of hydrogen reducing formation of undesired reaction intermediates of the organic silicon precursor which form at higher topographical elevations on the substrate than would otherwise occur without the feeding of the at least one of H_2O and H_2O_2 into the reactor under otherwise identical depositing conditions.

49. The semiconductor processing method of Claim 47, wherein the organic silicon precursor is selected from the group consisting of: tetraethoxysilane (TEOS), diethylsilane (DES), tetramethylcyclo-tetrasiloxane (TMCTS), fluorotriethoxysilane (FTES), and fluorotrialkoxysilane (FTAS).

50. The semiconductor processing method of Claim 47, wherein the chemical vapor deposition reactor is a hot wall reactor.

51. The semiconductor processing method of Claim 47, wherein the chemical vapor deposition reactor is a cold wall reactor.

52. The semiconductor processing method of Claim 48, wherein the organic silicon precursor is selected from the group consisting of: tetraethoxysilane (TEOS), diethylsilane (DES), tetramethylcyclo-tetrasiloxane (TMCTS), fluorotriethoxysilane (FTES), and fluorotrialkoxysilane (FTAS).